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ABSTRACT

Results of studies to assess accuracy of information reported by applicants to the Basic Educational Opportunity Grant (BEOG) program are summarized. Attention is also focused on applicant characteristics and corrective actions taken as a result of the studies. Overall, the studies found that the majority of BEOG applicants reported income accurately. Between 1974-1975 and 1976-1977, however, there was a decrease in the accuracy of reported income: accuracy of income reported by ineligible applicants remained relatively stable, while a greater decrease was evident for the eligibles. Applicants in the higher income ranges also showed a decrease in accuracy. It was determined that an application correction process that was intended to increase accuracy actually allowed applicants to submit incorrect data. When information provided on the BEOG application and federal income tax forms was inconsistent, incorrect eligibility determinations were also found. Corrective actions concerned: the pre-award validation, development of selective case action strategies, improvements to the application processing system, and improvements to the application form. Eight suggestions for future research on the BEOG application process are offered. (SW)

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VALIDATION OF STUDENT AND PARENT SUPPLIED DATA ON THE BASIC GRANT APPLICATION FORM

PROJECT SUMMARY

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PROJECT SUMMARY

VALIDATION OF STUDENT AND PARENT REPORTED DATA ON THE BASIC GRANT APPLICATION FORM

INTRODUCTION

The Basic Educatonal Opportunity Grant (BEOG) Program is currently the largest Federally sponsored program designed to assist students in overcoming financial barriers to a postsecondary education. Grant awards are made on the basis of an eligibility index (EI), which is an estimate of the contribution the student and his/her family are expected to make in meeting educational expenses. The EI is determined from financial resources and liability information reported by the student and his/her family on the Basic Grant application form. Given the fact that individual grants ranging to $1800 per year are currently made on the basis of self-reported information, Basic Grant Program management has supported a three-year validation contract to study application reporting accuracy and to monitor trends in reporting accuracy, applicant characteristics, and applicant behaviors. Based upon study findings, several actions have been taken to monitor and control program abuse. The purpose of this document is to summarize the key issues that have been addressed in studies conducted under the Validation Contract, to report the major study findings, to describe the corrective actions that have been taken as a result of the studies, and to identify areas where continued monitoring and/or further research is necessary.

STUDY ISSUES

The overriding issue and area of concern to BEOG Program management was, and continues to be, the accuracy of information reported on the grant application. Income, as the prime indicator of financial strength, is the key variable in the determination of eligibility for a Basic Grant. Therefore, the accuracy of reported income was a major issue and major focus in the validation contract. The accuracy of taxable income, household size and Federal income taxes was studied by matching data reported by a representative sample of Basic Grant applicants with data these same individuals reported to the Internal Revenue Service. This IRS Comparison Study also provided an opportunity for measuring the impact of discrepancies in any of the variables studied on the eligibility index. Further, with IRS data as the criteria of accuracy, it allowed profiles of misreporters to be developed.

Early findings of the IRS Statistical Comparison study showed that applicants who submitted corrections to their original applications tended to have less accurate data than applicants who did not submit corrections. This finding, coupled with an annual increase in the number of Basic Grant applicants who amended their applications led to a study of the Basic Grant application corrections processing systems. Issues addressed in this study included the following:

- Which items tend to be corrected most often and the resultant impact on the eligibility index.
- Whether the corrections processing system enables some applicants to misrepresent themselves in order to obtain a more favorable eligibility rating, or whether applicants submit corrections because they failed to provide adequate data on their initial application.

In the interest of providing financial assistance to students with unmet needs, the Basic Grant Program includes a special provision for applicants and families whose prior year income is not indicative of current financial strength. Under certain crisis circumstances such as death of a wage earner, divorce or loss of employment which severely constrains financial resources, applicants are allowed to file a Supplemental Application.

When a student meets one of the special conditions to file a Supplemental, eligibility for a Basic Grant is based upon income data estimated by the applicant for the current year instead of actual income from the prior tax year. A key issue concerning these applicants is simply "How well do they estimate?" This question, plus the increased percentages of applicants submitting supplemental applications was the basis for a study of supplemental filers. This study focused on the following areas:

- How accurate are the estimates of supplemental filers?
- What is the impact of misestimates on eligibility determinations?

Based upon the findings of some of these studies, the Basic Grant Program expanded its annual centrally-conducted validation of a small sample of applicants in the 1978-79 academic year to validation of a sample of 120,005 (6%) eligible applicants by Financial Aid offices at the institutions selected students enrolled in. Applicants were selected according to criteria suggested by the findings of the IRS Comparison Study, plus the experience and knowledge gained from the smaller-scale central validation efforts. In order to assess this effort, a statistical study of the pre-award validation effort was undertaken. This study addressed the following issues:

- The overall impact of the validation effort in terms of changes in eligibility determinations.
- The effectiveness of the validation selection criteria.
- The interaction of validation with other programmatic changes introduced in the 1978-79 academic year.

MAJOR RESEARCH FINDINGS

Overall, the studies found that the majority of Basic Grant applicants report income accurately. Between the 1974-75 and 1976-77 academic year, however, there was a decrease in the accuracy of reported income:

Accuracy of BEOG-reported Adjusted Gross Income:	Total		Eligible Applicants		Ineligible Applicants	
	1974-75	1976-77	1974-75	1976-77	1974-75	1976-77
	%		%		%	
Income Under-reported to BEOG	13.0	17.2	16.5	22.8	8.4	10.0
Income Accurate within $200	81.5	76.0	77.7	69.9	86.7	84.0
Income Over-reported to BEOG	5.4	6.7	5.8	7.3	4.9	6.0

SOURCE: Report Summary, 1976-77 Internal Revenue Service Comparison Study: Phase I, June 28, 1979.

Accuracy of income reported by ineligible applicants remained relatively stable, while a greater decrease was evident for the eligibles. Applicants in the higher income ranges also showed a decrease in accuracy.

It is interesting to note that the decreased accuracy of adjusted gross income most often resulted in raising the applicant's award potential. In contrast, between one-fourth to one-third of all income misreporting tended to result in applicants potentially receiving a smaller grant than that which they are entitled. Therefore, it is likely that the larger part of misreporting which potentially results in payment errors is probably intentional, while a smaller portion of all misreporting is not the result of fraudulent intent. Rather, these findings, taken together with contact with individual students undergoing central validation, have suggested that some applicants do not understand the reporting requirements and that others are simply careless in completing the application form.

Between the 1974-75 and 1976-77 academic years, the accuracy of reported Federal Income Taxes has remained stable at about 76 percent. The impact of discrepancies in income and taxes was measured in terms of changes to the eligibility index. The following results were obtained when adjusted gross income and Federal income taxes were used to compute eligibility indices:

Substitution of IRS income and tax data into calculation of BEOG Eligibility Index results in:	Eligible Applicants		Ineligible Applicants	
	1974-75	1976-77	1974-75	1976-77
	%		%	
Decreased Award Potential	12.1	13.2	7.5	9.6
Award Potential within 200 points	85.5	84.1	85.6	82.3
Increased Award Potential	2.4	2.7	7.0	8.1

Although misreporting of income increased, this increase was not carried over to the eligibility index. Rather, about 84 percent of all applicants would have received the same eligibility rating (within 200 points) had IRS data been used in determining eligibility. For those applicants with a change in eligibility, the use of IRS data would be likely to result in a decreased award five times more often than an increased award. Although some of the misreporting is probably unintentional, the disproportionately high tendency of misreporting to benefit the applicant was indicative of potential abuse in 1974-75 and 1976-77. In 1978-79, BSFA introduced major corrective actions by placing greater restrictions on the application corrections process, and two samples (one selected randomly and the other selected according to criteria associated with misreporting) of eligibles underwent validation at the institution level. As of June, 1979 only 13 percent of the randomly selected eligibles submitted a correction to adjusted gross income

and 9 percent submitted corrections to taxes paid. Overall, 30 percent submitted corrections to these and other critical fields which resulted in an average increase in eligibility index of 64 points. Although these findings support the effectiveness of corrective actions initiated by the Office of Education, inaccuracies beyond those uncovered through institutional validation still exist, as evidenced in the preliminary findings of the Basic Grant Quality Control Study of 1978-79 applicants.

In 1974-75 it was found that supplemental applicants did not tend to estimate income accurately. Monitoring this finding in 1975-76 and 1976-77 revealed that while the percentage of applicants filing supplemental applications doubled (from 2.3 percent to 4.6 percent of the total population), the accuracy of the income estimates showed no significant improvement. In 1976-77, only 2.9 percent of the eligibles estimated the same income that they later reported to IRS; in 1975-76, 12 percent of the supplemental filers reported the same income in 1976-77 as they had estimated in 1975-76. On the average in 1975-76, applicants filing a supplemental application estimated their incomes to be more than $5000 less than their actual earnings from 1974; this resulted in lowering their eligibility indices by an average of 678 points and therefore dramatically increasing their award potential. Only 28 percent of supplemental filers in 1976-77 would have received the same eligibility index (within 200 points), had actual income and taxes reported to IRS been used in the determination. It is important to note that eligibles were much more likely to have the same award potential if IRS data were used: 40 percent would have an eligibility index within 200 points of the one based on estimated income data. Significant numbers of ineligible supplemental filers (82 percent), unlike their counterparts who filed regular applications, would have changes greater than 200 points. However, three times as many ineligibles (18.8 percent) estimated to their disadvantage as did their eligible counterparts (6.6 percent).

In profiling income misreporters, it was found that the number of times an applicant amended his/her original application, the greater the likelihood of misreporting on the latest submission. In the interest of maintaining the integrity of the Program, applicants are advised to review all application data for correctness and to submit corrections if errors are detected. Although it was intended for the purpose of enhancing accuracy, the Basic Grant application correction processing system allows applicants to submit incorrect data. In the 1976-77 application year, the following findings led to the conclusion that the unrestricted use of the application correction processing system posed a serious threat to the integrity of the program:

- Applicants who were determined to be ineligible for a Basic Grant who submitted corrections tended to increase their award potential by decreasing their eligibility index by an average range of 370 to 617 points.
- Corrections to adjusted gross income made at the initiation of the applicant tended to decrease the eligibility index by 800 or more points in 45 percent of the cases where unsolicited corrections were made to adjusted gross income. Corrections to applicant resources, net assets and medical expenses/casualty losses were also associated with very large reductions in the eligibility index. These items were not among those subject to validation in the centralized validation effort.
- The majority of applicants (64 percent) who were rejected (i.e., no eligibility index was calculated by the Basic Grant application processing system due to incomplete or inconsistent data) were allowed to simply check a box to confirm the data reported originally. Consequently, assumed data, rather than reported data, and inconsistent data were used in eligibility determinations for these applicants.
- Applicants who receive warning comments not associated with rejection tended not to take any action.

Comparisons with IRS data in 1974-75 and 1976-77 revealed that income values assumed by the Basic Grant processor (e.g., the sum of portions of earned income for adjusted gross income) tended to be highly discrepant. Both studies also

showed that inconsistencies between reported income and taxes were associated with incorrect eligibility determinations. The greater the inconsistency, the larger the error in eligibility determination to the advantage of the applicant. Further, the 1976-77 IRS study found that data submitted in response to system edit comments addressing income tended to be incorrect, and in many cases (13 %), more incorrect than the data reported at the time of rejection.

In 1978-79, the application corrections processing system was studied again. In the interim, BSFA instituted major corrective actions by placing greater restrictions on the application correction process. A major reversal was noted: instead of the majority of corrections being submitted on the applicant's initiative, the majority of corrections submitted in 1978-79 were in response to more restrictive system screens. The rate at which applicants were rejected increased dramatically, and concern arose over the percentages of applicants who did not attempt to re-enter the system for an eligibility determination. The statistical nature of the corrections study precluded answering the question of whether the restrictions had effectively prevented ineligible applicants from gaining eligibility via the corrections process, or whether the restrictiveness of the system overwhelmed and discouraged potentially eligible applicants. For those applicants who did re-enter the system, however, the overwhelming finding was that the majority of corrections submitted in response to comments decreased award potential. These decreases may be a function of the effectiveness of the edits and the deterrant effects of validation, or both. In direct contrast with the 1976-77 findings, most corrections to adjusted gross income in 1978-79 were to the applicant's disadvantage. It was also found that about 90 percent of the applicants who had responded to a rejection edit before undergoing pre-award validation had accurate data when selected for validation. In general, the rejection edits did identify misreporting, and responses to the edits increased the level of accuracy. Generally the level of accuracy increased beyond the accuracy rate found in the random sample of applicants who underwent institutional pre-award validation. Thus, it was concluded that the edits were an important quality control mechanism for the applicants who re-entered the system, and that the rates at which some applicants failed to re-enter was a problem.

MAJOR CORRECTIVE ACTIONS TAKEN

Based upon the findings of these and other studies undertaken by BSFA, several corrective actions aimed at eliminating areas of actual and potential abuse have been initiated. Major corrective actions are summarized below:

1. Pre-award Validation

   The 1976-77 Corrections Analysis Study clearly showed trends toward abuse through the unrestricted use of the application corrections process. IRS study findings also showed an inverse relationship between the number of corrections and the accuracy of data. As a result of these findings, BSFA expanded validation from a centralized operation affecting less than one percent of the applicants to validation of six percent of the applicants before awards were made by institutional financial aid officers. The majority of applicants were selected according to corrections behaviors which appear suspect.

2. Development of Selective Case Action Strategies

   Based upon the Internal Revenue Service Comparison studies, characteristics of applicants likely to misreport key items were used to develop criteria for selective case action. The majority of applicants who have undergone central validation have been selected because they met criteria which have been linked empirically with misreporting.

3. Improvements to the Application Processing System

   As a result of studies undertaken in the validation project, a number of corrective action strategies were directed at the application processing system. These include revisions to the following areas:

   A. Based upon IRS study findings, values are not assumed for income, and reported taxes must be consistent with income. For instance, when an applicant reports earned income but fails to report an adjusted gross income, earned income is no longer substituted for adjusted gross income in determining eligibility. Further, Federal income taxes paid is now evaluted relative to reported income, household size, and itemized deductions. Previously the relationship between income and taxes was the subject of less scrutiny: only applicants whose taxes exceeded 50 percent of income were rejected.

B. Duplicate applications from the same applicant are not accepted. The only way to modify an original application is to correct the Student Eligibility Report resulting from that application.

C. While applicants were undergoing central validation, any corrections submitted by nonrespondents outside of responses to validation were not accepted, and no further processing occurred until validation was completed. This concept was later applied to applicants who had received their maximum entitlement for Basic Grants. Beginning in 1978-79, maximum entitlement recipients who submit an application are rejected.

D. As a result of the findings from studying the corrections process, greater restrictions were placed on the system in 1978-79. Assumed values were virtually eliminated, and applicants are now required to provide information for key data fields. Many edit comments which previously warned applicants were made more stringent and required the applicants to take an action to either supply new data or confirm apparently suspect data before being considered for eligibility. As a result of these restrictions, more than 30 percent of the applicants were rejected during 1978-79. Further, when applicants submitted corrections which dramatically increased their award potential by reducing the eligibility index by more than 400 points, a warning noting that this occurred is printed on the Student Eligibility Report to alert the Financial Aid Administrator. This condition also increases the student's likelihood of being selected for institutional validation.

E. Due to the edit restrictions significantly increasing the rejection rates and the proportion of applicants who did not re-enter the system after rejection, BSFA undertook a review of the comment text and format for the 1979-80 application year. A panel of financial aid administrators participated in reviewing and modifying the edit comments.

4. Improvements to the Application Form

Taken together with BSFA initiatives, the finding that a significant percentage of the students who misreport do so to their disadvantage, led to several actions taken to improve the Basic Grant application form. These changes included stylistic modifications (i.e., use of bold print and italics to highlight problematic areas), as well as content changes e.g., expanding and clarifying item definitions and reporting requirements). Numerous improvements have been made during the years, and major application revisions were also undertaken in 1979 when it was found that missing data and data quality problems occurred differentially by application source.

5. Basic Grant Application Year

The financial aid community has tended to support moving the application cycle back to begin before the end of the tax year (see report of the National Task Force on Student Aid Programs, 1975); however, the results of studying how well Basic Grant applicants can estimate income has caused BSFA to maintain its policy of requiring actual income from the prior year as the basis for eligibility determinations instead of allowing applicants to submit applications earlier and estimate income.

SUGGESTIONS FOR FURTHER RESEARCH

Although the Basic Grant Program has made great strides in its efforts to maintain and protect the integrity of the program, there is still a need to continue monitoring the effects of these efforts and to study areas of concern not yet resolved. As a part of its ongoing efforts, BSFA is undertaking or planning to continue monitoring in the following areas:

1. The most cost effective mechanism for monitoring accuracy of reported adjusted gross income and Federal taxes paid is through statistical comparisons with IRS income tax records. Such monitoring has been performed in two-year intervals, and an IRS comparison study is being undertaken on the 1979-80 applicant data base. This study will also provide an opportunity to compare the results of institutional pre-award validation with IRS data and examine the effectiveness of edits concerning adjusted gross income and Federal income taxes paid.

2. Monitoring the application correction process and the relationship of validation to the processing system edits will continue in 1979-80. Major areas of investigation will include assessing the effectiveness of impact of revisions to the edits and the validation selection criteria, monitoring overall rates of accuracy, and continuing to refine and create criteria for selecting error prone applications.

In addition to the planned analyses, the following optional areas for further study are presented for management decision and consideration.

3. Trends in the supplemental applicant population should continue to be monitored closely. The possibility of validating whether the applicant qualifies to file a supplemental should be considered; further, the possibility of validating the amount of income earned for the year in question up to the point the application was filed (i.e., the portion that is not estimated) should also be considered. Revising the application to include two income fields - amount earned to date and estimated remainder might facilitate such a validation effort. Given the magnitude of errors in income estimates, this procedure may have a significant impact, although it is recognized that its effectiveness would increase the later the supplemental application is filed.

4. Now that the Program Information and Monitoring System (PIMS) is approaching a schedule that will allow measuring the impact of corrective actions on actual award payments, it is suggested that future studies focus on payment changes instead of eligibility index changes. Since there is a nonlinear relationship between eligibility index changes and payment changes, the payment change is the better criterion and should be used in all future IRS studies. It is also suggested that OE develop a mechanism to collect payment data for all validation cases before the end-of-year validation rosters are sent out. Collecting these data will provide more reliable information for management decisions earlier in the year.

5. Although not addressed in the Validation contract, program statistics for 1979-80 have shown improvements in the rejection rates and re-entry rates after rejection. Calling upon the financial aid community to improve the format and text of the applications and the computer-generated edit messages is one apparent reason for the improvements.

It is suggested that BSFA routinely use input from users to improve the application process. In fact, it is possible that even greater improvements could be attained if financial aid officers and students contributed to the design of the forms and the edit messages. All changes should be thoroughly pilot tested before being introduced into the existing system.

6. Field data collection should be considered to answer the questions of why some rejected applicants fail to (attempt to) re-enter the system and whether valid data are provided in response to edits concerning fields which are not currently required for institutional validation (e.g., asset fields, nontaxable income, etc.). The statistical nature of the studies conducted under the validation contract did not allow these questions to be answered fully.

7. An investigation should be made of alternate disbursement system (ADS) students who were selected for validation. Although approximately 16 percent of the institutions are under the alternate disbursement system, fewer than three percent of the 120,005 students selected for validation were referred to the validation contractor as ADS students in 1978-79.

8. Corrections to adjusted gross income and taxes made in response to edit comments as well as in response to validation still need to be confirmed with IRS data. If the findings of the Pre-award Validation analysis and Corrections Analysis (i.e., that about 90 percent of the applicants provide valid data in response to edits before undergoing validation) are confirmed by the next IRS study, then it would be reasonable to reduce validation from its present scope to serve as a quality control check for the edits. However, when making such a decision, the deterrant effect of validation must also be recognized because it too may be contributing to improved accuracy. If the IRS study does not confirm the Pre-award validation findings, then the institutional validation process will be subject to question and/or alternative delivery systems will need to be considered.

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